

What is claimed is:

1. A storage medium for recording incomplete information data obtained by omitting some data from complete information data which provide complete information.

2. The storage medium according to claim 1, wherein the complete information data is PCM music data.

3. The storage medium according to claim 1, wherein the complete information data is music data obtained by compressing PCM music data.

4. The storage medium according to claim 1, wherein the complete information data is divided into a plurality of first amount of data, and the incomplete information data is a series of data, each of which is a remainder obtained by subtracting a second amount of data from the first amount of data, with the second amount of data being smaller than the first amount of data.

5. The storage medium according to claim 1, wherein the incomplete information data is a series of data, each of which is a remainder obtained by randomly excluding an unspecified amount of data from the complete information data.

6. The storage medium according to claim 1, wherein the complete information data is MPEG information data, and the incomplete information data is data obtained by excluding an I frame from the MPEG information data.

7. The storage medium according to claim 1, wherein the complete information data is MPEG4 audio TwinVQ music data, and the incomplete information data is data obtained by excluding

spectrum envelope and quantization information from the MPEG audio TwinVQ music data.

8. The storage medium according to claim 1, wherein the complete information data is MP3 (MPEG-1/Audio Layer 3) music data, and the incomplete information data is data obtained by excluding side information or Huffman table selection information, which is part of the side information, from the MP3 music data.

9. The storage medium according to claim 1, wherein the complete information data is ACC (MPEG-2/Advanced Audio Coding (ISO/IEC Standard 1381807)) music data, and the incomplete information data is data obtained by excluding Huffman table selection information from the ACC music data.

10. The storage medium according to claim 1, wherein the complete information data includes map data of respective areas and addresses of the map data in the storage medium, and the incomplete information data is the map data of the respective areas.

11. The storage medium according to claim 1 further including data that represents an acquisition source of complementary information data adapted to complement the incomplete information data thereby restoring the complete information data.

12. The storage medium according to claim 1 or 11, wherein each of the incomplete information data and complementary information data has a file format that possesses a header portion representing a data omitting method, a data

size and a file name.

13. The storage medium according to claim 1 or 11 further including a program providing a data restoration operation to combine the incomplete information data with the complementary information data thereby creating the complete information data.

14. An apparatus for creating recordation data comprising:

storage means for storing complete information data adapted to provide complete information;

separation means for omitting some data in the complete information to separate the complete information data into incomplete information data and complementary information data; and

write means for writing the incomplete information data separated by the separation means into a storage medium.

15. The apparatus for creating recordation data according to claim 14, wherein the separation means includes first extraction means for extracting a first amount of data from the complete information data, second extraction means for extracting a second amount of data from the complete information data, the second amount being smaller than the first amount, and control means for causing the first and second extraction means to repeatedly perform respective extraction operations alternately, and the write means successively writes the data extracted by the first extraction means into the storage medium to create the incomplete information data.

16. The apparatus for creating recordation data according to claim 15, wherein the write means successively writes the data extracted by the second extraction means into the storage medium to create the complementary information data.

17. The apparatus for creating recordation data according to claim 14, wherein the separation means includes data amount setting means for randomly setting a first data amount and a second data amount smaller than the first data amount, first extraction means for extracting the first data amount of data from the complete information data, second extraction means for extracting the second data amount of data from the complete information data, and control means for causing the data amount setting means and the first and second extraction means to perform a data amount setting operation and data extraction operations in turn and repeatedly, and the write means successively writes the data extracted by the first extraction means into the storage medium to create the incomplete information data.

18. The apparatus for creating recordation data according to claim 17, wherein the control means includes means for producing a random number generation specifying value before the control means causes the data amount setting means and first and second extraction means to operate, and means for setting the first and second data amounts in compliance with the random number generation specifying value every time the data amount setting means sets the first and second data

amounts.

19. The apparatus for creating recordation data according to claim 14, wherein the separation means includes first extraction means for extracting information data other than predetermined information data from the complete information data, second extraction means for extracting the predetermined information data from the complete information data, and control means for causing the first and second extraction means to perform respective extraction operations repeatedly, and the write means writes the data extracted by the first extraction means into the storage medium successively to create the incomplete information data.

20. The apparatus for creating recordation data according to claim 19, wherein the complete information data is MPEG4 audio TwinVQ music data, and the predetermined information is spectrum envelope and quantization information.

21. The apparatus for creating recordation data according to claim 19, wherein the complete information data includes map data of respective areas and map data addresses for the respective areas in the storage medium that records the map data, and the predetermined information is the map data addresses for the respective areas.

22. A data restoration apparatus comprising:

first storage means for recording incomplete information data obtained by omitting certain data in complete information data adapted to provide complete information;

second storage means for recording the certain data .

omitted from the complete information data as complementary information data; and

combine means for combining the incomplete information data recorded in the first storage means with the complementary information data recorded in the second storage means to create the complete information data.

23. The data restoration apparatus according to claim 22, wherein the combine means includes first extraction means for extracting a first amount of data from the incomplete information data, second extraction means for extracting a second amount of data from the complementary information data, the second amount being smaller than the first amount, and control means for causing the first and second extraction means to repeatedly perform respective extraction operations so as to combine the extracted data with each other and create the complete information data.

24. The data restoration apparatus according to claim 22, wherein the combine means includes data amount setting means for randomly setting a first data amount and a second data amount smaller than the first data amount, first extraction means for extracting the first data amount of data from the incomplete information data, second extraction means for extracting the second data amount of data from the complementary information data, and control means for causing the data amount setting means and the first and second extraction means to perform a data amount setting operation and respective extraction operations in turn and repeatedly, and connecting the extracted

data to create the incomplete information data.

25. The data restoration apparatus according to claim 24, wherein the second storage means stores a random number generation specifying value together with the complementary information data, the control means includes means for reading the random number generation specifying value from the second storage means immediately before the control means causes the data amount setting means and the first and second extraction means to operate, and means for setting a first data amount and a second data amount on the basis of the random number generation specifying value every time the data amount setting is performed.

26. The data restoration apparatus according to claim 22, wherein the complete information data is MPEG4 audio TwinVQ music data, and the predetermined information is spectrum envelope and quantization information.

27. The data restoration apparatus according to claim 22, wherein the complete information data is map data of respective areas and map data addresses for the respective areas in a storage medium that records the map data, and the predetermined information is the map data addresses for the respective areas.

28. The data restoration apparatus according to claim 22 installed in a cellular telephone or a client terminal device.

29. The data restoration apparatus according to claim 28, wherein the cellular telephone or client terminal device has replay means for replaying the complete information data.

30. The data restoration apparatus according to claim 22 further including a server for providing the complementary information data, communication means for accessing the server via a communication line or network to receive the complementary information data, and means for storing the complementary information data received by the communication means into the second storage means.